

**DEPARTMENT OF HEALTH AND HUMAN SERVICES  
PUBLIC HEALTH SERVICE  
NATIONAL INSTITUTES OF HEALTH  
NATIONAL ADVISORY COUNCIL FOR  
BIOMEDICAL IMAGING AND BIOENGINEERING  
STRATEGIC PLAN DEVELOPMENT SUBCOMMITTEE**

**Summary of Meeting  
May 30, 2003**

The first meeting of the Strategic Plan Development Subcommittee was convened at 8:40 A.M. on May 30, 2003. Dr. Frank Yin acted as chair.

Committee members present:

Dr. Frank C. Yin  
Dr. Janie M. Fouke  
Dr. Carlo J. DeLuca  
Dr. Barbara J. McNeil (through teleconference)  
Dr. Norbert J. Pelc

Other Council members present

Dr. James G. Smirniotopoulos  
Dr. Michael W. Weiner

NIBIB staff present:

Dr. Roderic Pettigrew  
Dr. Joan Harmon  
Dr. Bill Heetderks  
Dr. Chris Kelley  
Dr. Mary Pastel  
Dr. Edward Staab  
Dr. Peter Kirchner

**Summary of Federal Guidelines**

The staff distributed and briefly reviewed the operating procedures for NACBIB subcommittees developed in accordance with the Federal Advisory Committee Act and the Government in the Sunshine Act. In general, subcommittee procedure follows council procedure. Staff emphasized rules on public access to subcommittee operations and procedures that govern communication between the subcommittee and the staff of NIBIB.

**Subcommittee Structure and Procedures**

The Subcommittee requested clarification on the length of terms of service on the NACBIB and proceeded to discuss terms of service for subcommittee membership and for the office of Subcommittee chairperson. It was agreed that Subcommittee members could serve four years and the chairperson for one year, renewable for an additional year. The members felt it was important for a Council member be on the Subcommittee for at least one year before becoming the chairperson.

Dr. Yin was elected as the first Chair of the Strategic Plan Development Subcommittee.

It was recommended and agreed that the next Subcommittee meeting be held immediately before the regular September Council meeting, in the same location, beginning at 7:00 A.M.

A short discussion on reporting the conclusions of the Subcommittee to the full Council occurred. Staff suggested that a report be given during Council open session immediately following the subcommittee meeting. All committee members approved.

### **Purpose of the Subcommittee**

In initiating dialogue on the committee's function, the Subcommittee requested that Dr. Pettigrew expand on the purpose and role of the Strategic Plan Development Subcommittee. Dr. Pettigrew indicated that the NIBIB is looking for guidance on how to meet the challenges facing the NIBIB and to fulfill its mission. Some of these challenges include a portfolio with a high percentage of new applications and a rapidly growing portfolio with little increase in projected budgets for the next few years. Drawing from the significant amount of feedback that the NIBIB has obtained through recent workshops and meetings, the Subcommittee can also provide input on research focus areas. Dr. Pettigrew remarked on the positive response of Council to the staff proposal on "Quantum Grants" and explained that another potential function of the Subcommittee will be to review similar propositions brought forth by staff. In conclusion, Dr. Pettigrew raised the questions: Where would you like to see the institute in five years? And how do we get there?

The Subcommittee inquired about the Institute's expectation of the proportion of NIBIB's portfolio that would be investigator-initiated applications versus those in response to RFAs. Dr. Pettigrew replied that NIBIB has already seen a significant increase in unsolicited applications, over 250 percent from fiscal year 2002 to 2003 and the trend supports further increases in the future. A significant increase in budget for fiscal year 2003 led to the issuance of a large number of RFAs. Fewer initiatives will probably be put forth in fiscal year 2004. As the Institute matures, Dr. Pettigrew predicted that the composition of the portfolio would most likely resemble that of other Institutes at the NIH. Dr. Bill Heetderks, Associate Director for Extramural Science Programs, NIBIB concurred with Dr. Pettigrew's assessment, adding that a considerable number of the applications submitted to the NIBIB are prepared by investigators new to the NIH, and as these investigators get additional experience in the NIH grants process, the number of successful applications should increase.

The discussion returned to the role of the Subcommittee in strategic plan development. Dr. Heetderks expressed the view that the Subcommittee's contribution could be in three areas: review of the Institute's strategic planning process; review of initiatives created by staff to accomplish the goals of the plan; and involvement in the ongoing planning processes of the Institute. The Subcommittee inquired whether the process should be framed by the NIH Roadmap activities. Staff distinguished between the trans-NIH focus of NIH roadmap activities and the mission-specific process for the Institute.

The Subcommittee inquired about the current portfolio of the NIBIB, maintaining that the committee ought to have some knowledge of the institute's present range of funded grants

while discerning future direction. Staff remarked on the difficulty of this task, given the dramatic changes in the portfolio that had occurred over the past few months and that would probably continue in the next few months. However, it was decided that a report on the NIBIB portfolio would be shared with the Subcommittee before the January 2004 Council Meeting that would reflect the major transfer of grants into the NIBIB from other Institutes, as well as the addition of grants awarded in response to the fiscal year 2003 initiatives.

Further discussion ensued on whether the Institute or the Subcommittee would assume leadership in the development of the strategic plan. The Subcommittee requested that staff explain strategic planning processes that are already in place at the NIBIB.

Dr. Heetderks responded with a brief presentation on some NIBIB activities in this area. He distributed reports on three workshops: a future directions meeting in December 2002; an August 2002 training workshop; and the Jackson, MS imaging meeting of March 2003 and noted that recommendations from these meetings would inform the process. He distributed slides and described in detail a staff retreat of February 2002 where staff reviewed the Institute's mission and discussed concepts that are responsive to this mission. In the area of training, the staff considered: a modified institutional training award; a medical residency research program; an early career development award; and a potential training component for Bioengineering Research Partnerships and Center grants.

Research areas discussed included: computational biology; bioinformatics; non-traditional science disciplines; multiple scale modeling and analysis; image-guided intervention; molecular imaging; surrogate markers; biodefense; biomaterials; prosthetics; and tissue engineering. At this meeting staff also discussed potential measures of success, such as: the success of R21 grantees in obtaining R01s; patents, products and publications evolving from NIBIB supported research; increased referrals to NIBIB through the NIH referral process; improved success rate for applications, many of which come from investigators new to the NIH; and progress of trainees. The Subcommittee suggested that staff add the success of competitive renewal applications and thoroughly examine the usefulness of the presented assessment measures.

Returning to the question of who develops the strategic plan, it was agreed that the NIBIB would prepare a strategic plan, and the Subcommittee would provide constructive critique. The Subcommittee then proposed that the group should begin discussion of thematic issues that will guide the development of the plan. To generate a list of themes to be explored, it was suggested that the Subcommittee hold a series of town meetings to solicit input or request feedback through a general announcement on the NIBIB website. The Subcommittee expressed strong support for NIBIB workshops as a tool for obtaining community input and requested that staff provide early notification of upcoming workshops to facilitate participation by Council members. Rapid preparation and distribution of summaries of these workshops prior to Subcommittee meetings would contribute to Subcommittee discussions. The staff agreed to send invitations to all Council members to each upcoming NIBIB workshop. Given that recommendations from these workshops will also feed into the strategic plan, it was proposed that at least one Subcommittee member attend each of these meetings.

Dr. Pettigrew requested that the Subcommittee provide input on how the Institute could meet the demands of the research community within existing constraints. A brief discussion of portfolio management followed, with queries from the Subcommittee on the impact of limited future budget increases on the ability of the NIBIB to support new awards. Dr. Pettigrew indicated that staff was working on a portfolio management process that would lead to a steady turnover of a portion of the portfolio each year. Later in the discussion, the Subcommittee requested that the staff provide information prior to the next meeting on projected portfolio turnover for the next three to five years.

The Subcommittee expressed concern regarding equity across Institutes at the NIH in the award process and equity in success rates for individual programs, such as the SBIR program for which NIBIB receives a large number of applications. The staff encouraged the committee to share its concern about the SBIR program with the NIH. The staff also further explained the challenge of allocating only 2.5 percent of the budget to this program, as mandated by NIH, given the large number of meritorious applications received. The Subcommittee suggested that the unique mission of the NIBIB perhaps required that a larger share be considered. Dr. Pettigrew indicated that NIBIB had made adjustments during the previous cycle to ensure a reasonable pay line for this program. The Subcommittee and staff agreed that Council should offer guidance to the NIBIB on managing the SBIR issue. The Subcommittee suggested a workshop to gain feedback from the small business community. All also agreed that the SBIR program should be an agenda item for the September meeting.

The Subcommittee expressed the desire to advise the NIBIB on the development of the Division of Intramural Science Programs. The staff should provide the Subcommittee with more information on this Division, including the rationale for the creation of the division, the direction and scope. This topic should be an agenda item for the next meeting.

The Subcommittee asked how NIBIB was partnering with others who shared the mission of the Institute. Dr. Pettigrew indicated that the NIBIB had initiated discussions with NIST, the Federal Drug Administration and the Department of Energy and would continue this dialogue. The Institute also would pursue partnerships with industry. The Subcommittee suggested that an industrial advisory board might be useful. It was noted that NIBIB planned to sponsor a Bioentrepreneurial working group meeting on August 1, 2003 that would focus on these potential alliances.

### **Strategy and Timeline for the Development of a Plan**

The Subcommittee briefly discussed the timeline for the development of a strategic plan. It was proposed that a draft plan should be presented at the January 2004 Council Meeting. The Subcommittee agreed to develop the agenda for the next meeting through e-mail. Dr. Pettigrew defined the role of the Subcommittee in the creation of a strategic plan as advisory; NIBIB staff would write the plan. He requested that the Subcommittee offer feedback on the following: thematic areas of focus; intramural division scope and direction; metrics for gauging success of scientific programs; and strategies for leveraging resources through partnerships with industry. The Subcommittee added to this list advice on the mix of mechanisms in NIBIB's portfolio. To ensure consistency with existing success measures, the staff will provide the Subcommittee with the NIH Government Performance

and Results Act guidelines. Dr. Heetderks affirmed that the NIBIB would develop an outline of the strategic plan by September Council.

### **Agenda for Next Meeting**

After discussion, the Subcommittee proposed the following for the next meeting's agenda: SBIR/STTR program; intramural research; partnerships with industry/leveraging resources; portfolio assessment; and themes of the strategic plan.

*Meeting adjourned at 10:30 A.M.*

We certify that, to the best of our knowledge, the foregoing minutes and attachments are accurate and complete.

---

Joan T. Harmon, Ph.D.  
Executive Secretary  
National Advisory Council for  
Biomedical Imaging and  
Bioengineering  
Deputy Associate Director  
Office of Science Administration  
National Institute of Biomedical  
Imaging and Bioengineering

---

Roderic I. Pettigrew, Ph. D., M.D.  
Chairperson  
National Advisory Council for  
Biomedical Imaging and  
Bioengineering  
Director  
National Institute of Biomedical  
Imaging and Bioengineering

The Council will consider these minutes at its next meeting. Corrections or notations will be incorporated in the minutes of that meeting.